

### Amendments to the Claims

Claim 1. (currently amended) An apparatus for providing leak detection and reporting of different types of leaks, ~~said apparatus for use within a reservoir of a toilet having an inlet valve with a refill tube assembly therein, said reservoir also having an overflow pipe and an opening in the reservoir for a flapper for controlling water flow from the reservoir,~~ said apparatus comprising:

~~a timing module; and~~

~~a water flow sensor; and~~

a timing module coupled to said the water flow sensor and in cooperation with the water flow sensor, the timing module being operable to:

~~for sensing water flow, said timing module having a calibration mode for measuring a standard fill time required to properly fill the reservoir following a flush;~~

~~, said apparatus having a lower time threshold and an upper time threshold based upon said standard fill time, said apparatus activating an first alarm if a a-subsequently detected water flow occurs for a period of time that is -fill time is below the standard fill time by said lower time; a first threshold amount of time; and~~

activate an alarm if a subsequently detected water flow occurs for a period of time that is to identify a small leak, or activating a second alarm if another fill time is above the said upper standard fill time by a second threshold amount of time to identify a large leak, wherein different alarms may be activated in response to different types of leaks.

Claim 2. (currently amended) The apparatus of Claim 1 wherein said the toilet reservoir has an inlet valve with a refill tube assembly therein, an overflow pipe and an opening in the reservoir for a flapper for controlling water flow from the reservoir, and the water flow sensor is

adapted to detect leaks as a result of a leaking inlet valve as well as leaks between the flapper and the opening in the reservoir.

Claim 3. (currently amended) The apparatus of Claim 1 wherein ~~said the toilet reservoir~~ has an inlet valve with a refill tube assembly therein, an overflow pipe and an opening in the reservoir for a flapper for controlling water flow from the reservoir, and the water flow sensor is configured to be received and retained within the an overflow pipe.

Claim 4. (currently amended) The apparatus of Claim 1 wherein ~~said the toilet reservoir~~ has an inlet valve with a refill tube assembly therein, an overflow pipe and an opening in the reservoir for a flapper for controlling water flow from the reservoir, and the water flow sensor is positioned adjacent to the exterior of the overflow pipe, and both said water flow sensor and the overflow pipe to receive water from the refill tube assembly.

Claims 5-21 (cancelled)

Claim 22. (currently amended) A method for providing leak detection ~~and reporting~~ comprising the following steps:

~~calculating-determining~~ a standard fill time for filling a toilet reservoir with water;

~~calculating-determining~~ a lower time threshold and an upper time threshold based upon said standard fill time;

activating a first alarm when a subsequent fill time is below said lower time threshold to identify a slow leak; or

activating a second alarm if a subsequent fill time is above said upper time threshold to identify a faster leak; ~~wherein different alarms may be activated in response to different types of leaks.~~

Claim 23. (previously presented) The method of Claim 22 wherein either of said activating steps is performed as a result of detecting a leaking inlet valve or a leak between a flapper in an opening in the reservoir.

Claim 24. (previously presented) The method of Claim 22 wherein water passes through a water flow sensor to perform said step of calculating said standard fill time.

Claim 25. (previously presented) The method of Claim 22 wherein water contacts a water flow sensor to perform said step of calculating said standard fill time.

Claim 26. (currently amended) The method of Claim 22 wherein said step of ~~calculating~~ determining said standard fill time is performed by measuring water flow through at least a portion of an overflow pipe in a reservoir of a toilet.

Claim 27. (currently amended) The method of Claim 22 wherein said step of ~~calculating~~ determining said standard fill time is performed by measuring water flow from a refill tube assembly which passes through at least a portion of an overflow pipe in a reservoir of a toilet.

Claim 28. (currently amended) The method of Claim 22 wherein said step of ~~calculating~~ determining said standard fill time is performed by measuring water flow from a refill tube assembly in a reservoir of a toilet.

Claim 29. (previously presented) The method of Claim 22 further comprising the step of sending said alarms to a remote device.

Claim 30. (previously presented) The method of Claim 22 further comprising the step of providing a resistance threshold for comparison with a resistance measured between a pair of contacts in order to determine when water flow exists in a water flow sensor having said contacts.

Claim 31. (previously presented) The method of Claim 30 wherein said resistance measured between said contacts must exceed said resistance threshold to indicate water flow through said water flow sensor.

Claim 32. (previously presented) The method of Claim 30 wherein said resistance measured between said contacts must be below said resistance threshold to indicate water flow through said water flow sensor.

Claims 33-38. (cancelled)

Claim 39. (new) An apparatus for providing leak detection within a toilet reservoir, said apparatus comprising:

a water flow sensor; and

a timing module coupled to the water flow sensor and in cooperation with the water flow sensor, the timing module being operative to:

receive a standard fill time required to properly fill the reservoir following a flush;

activate an alarm if the water flow sensor detects water flow for a period of time that is outside of a threshold of the standard fill time.

Claim 40. (new) The apparatus of claim 39, wherein the timing module is operative to receive a standard fill time by:

entering into a calibration mode;

during the calibration mode, measuring the time that water flow is sensed during a flushing operation; and

storing the time as a standard fill time.

Claim 41. (new) The apparatus of claim 40, wherein during the calibration mode, the timing module is further operative to calculate a slow-leak time threshold based at least in part on the standard fill time, the slow-leak time threshold being substantially shorter than the standard fill time.

Claim 42. (new) The apparatus of claim 40, wherein during the calibration mode, the timing module is further operative to calculate a fast-leak time threshold based at least in part on the standard fill time, the fast-leak time threshold being substantially longer than the standard fill time.

Claim 43. (new) The apparatus of claim 40, wherein during the calibration mode, the timing module is further operative to:

calculate a slow-leak time threshold based at least in part on the standard fill time, the slow-leak time threshold being substantially shorter than the standard fill time; and

calculate a fast-leak time threshold based at least in part on the standard fill time, the fast-leak time threshold being substantially longer than the standard fill time.